Claims

1. Method for detecting calls,

in which a call request (124) is sent from a calling terminal device (16, 100) by way of a signaling unit (44) to a called terminal device (36) in order to enable a data transmission between the terminal devices (16, 100; 36),

in which user data is transmitted between the calling terminal device (16, 100) and the called terminal device (36),

and in which the signaling unit (44) notes an identifier for the calling terminal device (16, 100), in particular stores the identifier in a memory unit (60), initiates the storage or outputs the identifier on an output unit (62),
wherein
the called terminal device (16) is a terminal device in a data packet transmission network (14),

and that the signaling unit (44) performs signaling in accordance with a signaling protocol which has been defined for data transmission in a data packet transmission network (14).

2. Method according to Claim 1,
wherein
a detection request (136) is sent to the signaling unit (44) from the called terminal device (36) during the data transmission or in conjunction with the signaling relating to the data transmission,

that the signaling unit (44) notes the identifier on the basis of the detection request (136),

and that the detection request (136) is transmitted with a message and/or an information element which has been defined for the signaling in the data packet transmission network (14).

3. Method according to Claim 1,
wherein
an identifier is stored for the called terminal device,

that upon arrival of the call request, a check is performed by the signaling unit (44) as to whether the identifier of the terminal device to be called has been stored,

and that the identifier of the calling terminal device is noted when the identifier of the terminal device to be called (36) has been stored.

4. Method according to Claim 1 or 2,
wherein
the identifier of the calling terminal device (16, 100) is conveyed to the signaling unit (44) in conjunction with the call request (124).

5. Method according to one of Claims 1 to 3,
wherein
the calling terminal device (16) is a terminal device in a circuit-switched data transmission network (12),

and/or that the identifier of the calling terminal device (16) is requested as a result of the detection request (136) by the signaling unit (44) by way of a network transition unit (48) to the circuit-switched data transmission network (12) with the aid of an identifier request,

and/or that in order to process the identifier request in the circuit-switched data transmission network (12) a standardized

method is employed, in particular a method in accordance with ITU-T standard Q.731.7,

and/or that the identifier request is transmitted in accordance with at least one of the standards Q.1902.1 to Q.1902.6 and/or according to SIP-T.

6. Method according to one of Claims 1 to 4,
wherein
the calling terminal device (100) is a terminal device in a data packet transmission network (14),

and that the signaling unit (44) or another signaling unit (102) checks the access authorization of the calling terminal device (100) for the data packet transmission network (14).

7. Method according to one of the previous claims,
wherein
the signaling protocol is the SIP protocol or the ITU-T H.225 protocol or another signaling protocol which is suitable for signaling between the terminal device (36) and the signaling unit (44).

8. Method according to one of the previous claims,
wherein
the detection request is transmitted in an INFO message using the INFO method according to RFC 2976,

and that a header section of the INFO message or a body section of the INFO message contains an information element which serves to uniquely identify the detection request (136).

9. Method according to one of Claims 1 to 7,
wherein

the detection request (136) is transmitted in a message using a method in accordance with an RFC defined for the detection of calls or according to an extended H.225 protocol or according to another signaling protocol between the terminal device (36) and the signaling unit (44).

10. Method according to Claim 9,
wherein
the message contains no additional information elements for identifying the detection request (136),

or that the message contains in its header or in its body an information element which uniquely identifies the detection request (136).

11. Method according to one of the previous claims,
wherein
in addition to the identifier of the calling terminal device (16, 100) the identifier of the called terminal device (36) is noted,

and/or that the case of a call diversion, the identifiers of all terminal devices involved in the call diversion are noted,

and/or that the date and/or the time is/are noted,

and/or that at least one identifier for the signaling units (44, 102) involved in the call processing is noted,

and/or that identifiers which are relevant to the transmission of the user data by way of the data packet transmission network (14) are stored.

12. Terminal device (36),

with a connection unit for connecting the terminal device (36) to a data packet transmission network (14),

and with a control unit which sends requests to a signaling unit (44),

wherein
the control unit contains a function with which a detection request (136) can be generated automatically at the instigation of a person operating the terminal device (36), and when this request is processed the signaling unit (44) notes an identifier of a terminal device (16, 100) calling the terminal device (36).

13. Terminal device (36) according to Claim 12,
wherein
the terminal device (36) contains at least one further unit or function, during whose operation a method step relating to the called terminal device (36) is performed according to one of Claims 1 to 11.

14. Signaling unit (44),

with a control unit which carries out signaling in accordance with a signaling protocol which has been defined for a data transmission in a data packet transmission network (14),

wherein
the control unit provides a function which automatically notes an identifier of a terminal device (16, 100) calling the called terminal device (36).

15. Signaling unit (44) according to Claim 14,
wherein
the signaling unit (44) contains at least one further unit or function, during whose operation a method step relating to the signaling unit (44) is performed according to one of Claims 1 to 9.

16. Program with a sequence of instructions, during whose execution by a processor the function of a terminal device (36) is provided according to Claim 12 or 13 or the function of a signaling unit (44) is provided according to Claim 14 or 15.